Amendments to Specification

Please amend the named inventors of the present application by deleting the name John Dennis Underwood.

-o-0-o-

Please amend the text at page 1, lines 8 to 14, line as follows:

The present invention relates to a computationally efficient method of finding patterns in sequences of symbols written in a an particular alphabet, to a computer readable medium having instructions for controlling a computer system to perform the method, and to a computer readable medium containing a data structure used in the practice of the method.

-o-0-o-

Please amend the text at page 2, line 28 through page 3, line 12 as follows:

In accordance with the method, for each sequence, a master offset table is formed. The master offset table groups for each symbol the position (position index) in the sequence occupied by each occurrence of that symbol. The difference in position between each occurrence of a symbol in one of the sequences and each occurrence of that same symbol in the other sequence is determined. A Pattern Map, typically is in the form of a table, is formed. Each row in the table represents a single value of "difference in position". For each given value of a difference in position, the table lists the position in the first sequence of each symbol in the first sequence that appears in the second sequence with that difference in position. The collection of the symbols tabulated for each value of difference in position thereby defines a parent pattern in the first sequence that is repeated in the second sequence.

The Pattern Map may also list lists the number of symbols tabulated for each value of a difference in position. Thus, those parent patterns in the Pattern Map that have a number of symbols greater than a predetermined threshold may be readily identified from the number of symbols tabulation.

-o-0-o-

Please amend the text at page 4, lines 25-26 as follows:

Figures 2A and 2B show Figure 2 shows the Pattern Map of the first example;

-o-0-o-

Please amend the text at page 5, lines 1-3 as follows:

Please amend the paragraph starting at page 8, line 3 as follows:

The pattern **L.KV........V........PH** (SEQ ID NO:4) is found in both sequences (shown underlined in the above statement of the sequences S_1 and S_2). Here, the dots represent locations where the symbols in the two sequences do not match, and are thus considered placeholder positions in the pattern.

-o-0-o-

Please amend the paragraph starting at page 12, line 16 as follows:

Reading out patterns is now simple. The collection of the symbols tabulated for each value of difference in position (i.e., each row) in the Pattern Map defines a pattern in the first sequence that is repeated in the second sequence. Each row of the Pattern Map is a pattern of symbols contained in sequences S_1, S_2. The pattern, in symbolic form, is determined by consulting S_1 to determine the symbol at the location indicated by the Pattern Map index. For example, Pattern Map row 35 is the above-mentioned pattern L.KV........V........PH (SEQ ID NO:4). The pattern is constructed by noting the relative positions of these symbols and inserting the appropriate number of placeholders (one placeholder between the L and K, eight placeholders between the V and V, and eight placeholders between the V and P).

-o-0-o-

Please amend the paragraph starting at page 13, line 33 as follows:

If, for example, it were desired to identify all those patterns that include more than four symbols, it may be seen by examination of the second column of the Pattern Map that there are eleven patterns of four or more symbols, thus:

Pattern	Row Index
P..FQRSL (SEQ ID NO:5)	Line 24
V.....P.....I...........L (SEQ ID NO:6	Line 31
L.KV........V........PH (SEQ ID NO:4)	Line 35
P.SK.P..........P (SEQ ID NO:7)	Line 36
P..KVP.......V (SEQ ID NO:8)	Line 41
V........V.......T.....KA (SEQ ID NO:9)	Line 44
C..............P........P...V (SEQ ID NO:10)	Line 46
E.G................Q......P........ ....Q (SEQ ID NO:11)	Line 48

3